

## ABSTRACT OF THE DISCLOSURE

A system and method for preprocessing input data to a support vector machine (SVM). The SVM is a system model having parameters that define the representation of the system being modeled, and operates in two modes: run-time and training. A data preprocessor preprocesses received data in accordance with predetermined preprocessing parameters, and outputs preprocessed data. The data preprocessor includes an input buffer for receiving and storing the input data. The input data may include one or more outlier values. A data filter detects and removes any outlier values in the input data, generating corrected input data. The filter may optionally replace the outlier values in the input data. An output device outputs the corrected data from the data filter as preprocessed data. The corrected data may be input to the SVM in training mode to train the SVM, and/or in run-time mode to generate control parameters and/or predictive output information.